Please amend the claims as follows.

1. (Currently amended) An apparatus comprising:

at least one processor;

a memory coupled to the at least one processor;

a network interface that couples the apparatus to a network that is coupled to a plurality of other computer systems and wherein the apparatus and the plurality of other computer systems form a cluster of computers that cooperate via ordered messages to perform a task; and

a cluster communication mechanism residing in the memory and executed by the at least one processor, the cluster communication mechanism including a sliding send window that communicates at least one ordered message to a plurality of the other computer systems without waiting for an acknowledge message from any of the plurality of other computer systems before sending out the next ordered message, and wherein each ordered message includes a header with information that indicates whether an acknowledge message for the ordered messages may be delayed and grouped with at least one subsequent acknowledge message, and the cluster communication mechanism enforces execution order of a plurality of received messages to perform the task; wherein the cluster communication mechanism sends a null message forcing acknowledges to pending messages to be sent by the plurality of other computer systems when the cluster communication mechanism changes to a new destination for sending subsequent messages.

2. (Cancelled)

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3. (Currently amended) The apparatus of claim [[2]] 1 wherein at least one of the plurality of other computers includes a message timer to determine to send an acknowledge without waiting to send a group acknowledge when the header indicates that an acknowledge message can be delayed and grouped with at least one subsequent acknowledge message.

1   4. (Previously presented) A networked computer system comprising:

2   a cluster of computer systems that cooperate via ordered messages to perform a

3   task wherein each computer system includes:

4   a network interface that couples each computer system via a network to

5   other computer systems in the cluster;

6   a memory; and

7   a cluster communication mechanism residing in the memory, the cluster

8   communication mechanism enforcing execution order of a plurality of received

9   messages to perform the task, the cluster communication mechanism including a

10   sliding send window that communicates at least one ordered message to a

11   plurality of other computer systems without waiting for an acknowledgment from

12   any of the plurality of other computer systems before sending out the next ordered

13   message;

14   wherein each ordered message includes a header with information that

15   indicates whether an acknowledge message for the ordered messages may be

16   delayed and grouped with at least one subsequent acknowledge message, and

17   wherein at least one of the plurality of other computers includes a message timer

18   to determine to send an acknowledge without waiting to send a group

19   acknowledge when the header indicates that an acknowledge message can be

20   delayed and grouped with the at least one subsequent acknowledge message.

1   5. (Previously presented) The networked computer system of claim 4 wherein the cluster

2   communication mechanism sends a null message forcing acknowledges to pending

3   messages to be sent by the plurality of other computer systems when the cluster

4   communication mechanism changes to a new destination for sending subsequent

5   messages.

1   6. (Currently amended) A computer-implemented method for processing a task in a

2   clustered computing environment, the method comprising the steps of:

3   providing a cluster communication mechanism executing on a first computer

4   system in a cluster wherein the computers in the cluster cooperate via ordered messages

5   to perform the task and wherein the cluster communications mechanism includes a sliding

6   send window that communicates at least one ordered message to a plurality of other

7   computer systems in the cluster without waiting for an acknowledgment from each

8   computer system in the cluster that received an ordered message before sending out the

9   next ordered message, and wherein the cluster communication mechanism enforces

10   execution order of a plurality of received messages to perform the task;

11   the cluster communication mechanism sending a first ordered message to a first

12   plurality of other computer systems in the cluster; and

13   the cluster communication mechanism sending a second ordered message to a

14   second plurality of other computer systems in the cluster without waiting for a response to

15   the first ordered message from each of the first plurality of other computer systems in the

16   cluster;

17   wherein the cluster communication mechanism sends a null message forcing

18   acknowledges to pending messages to be sent by the plurality of other computer systems

19   when the cluster communication mechanism changes to a new destination for sending

20   subsequent messages.

1   7. (Previously Presented) The method of claim 6 further comprising the step of at least

2   one of the first plurality of other computer systems in the cluster responding to the first

3   and second ordered messages by sending a single acknowledge message to the cluster

4   communication mechanism that acknowledges both the first and second ordered

5   messages.

1 8. (Original) The method of claim 6 wherein the first and second ordered messages each

2 include a header with information that indicates whether an acknowledge message for the

3 first and second ordered messages may be delayed and grouped with at least one

4 subsequent acknowledge message.

1   9. (Currently Amended) A program product comprising:

2   (A) a computer program comprising:

3   (A1) a cluster communication mechanism that includes a sliding send

4   window that communicates at least one ordered message to a plurality of other

5   computer systems in a cluster computer system that cooperate via ordered

6   messages to perform a task without waiting for an acknowledgment from any of

7   the plurality of other computer systems before sending out the next ordered

8   message, and wherein the cluster communication mechanism enforces execution

9   of a plurality of received messages to perform the task, wherein the cluster

10   communication mechanism sends a null message forcing acknowledges to

11   pending messages to be sent by the plurality of other computer systems when the

12   cluster communication mechanism changes to a new destination for sending

13   subsequent messages; and

14   (B) recordable ~~signal bearing~~ media bearing the computer program.

1   10. (Cancelled)

1   11. (Cancelled)

1   12. (Original) The program product of claim 9 wherein each ordered message includes a

2   header with information that indicates whether an acknowledge message for the ordered

3   messages may be delayed and grouped with at least one subsequent acknowledge

4   message.

1   13. (Previously Presented) The apparatus of claim 1 wherein the cluster communication

2   mechanism communicates the at least one ordered message to the plurality of other

3   computer systems via IP multicast.

1   14. (Cancelled)

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1   15. (Previously Presented) The method of claim 6 wherein first plurality of computer
2   systems includes all computer systems in the second plurality of computer systems.

1   16. (Previously Presented) The method of claim 6 wherein the first plurality of computer
2   system comprises the second plurality of computer systems.

1   17. (Previously Presented) The method of claim 6 wherein the cluster communication
2   mechanism communicates the at least one ordered message to the plurality of other
3   computer systems via IP multicast.

1   18. (Cancelled)

1   19. (Previously Presented) The program product of claim 9 wherein the cluster
2   communication mechanism communicates the at least one ordered message to the
3   plurality of other computer systems via IP multicast.

1   20. (Cancelled)

1   21. (Cancelled)

1   22. (Currently amended) The method of claim [[21]] 6 wherein at least one of the
2   plurality of other computers includes a message timer to determine to send an
3   acknowledge without waiting to send a group acknowledge when the header indicates that
4   an acknowledge message can be delayed and grouped with at least one subsequent
5   acknowledge message.

1   23. (Cancelled)

1   24. (Currently amended) The program product of claim [[23]] 9 wherein at least one of

2   the plurality of other computers includes a message timer to determine to send an

3   acknowledge without waiting to send a group acknowledge when the header indicates that

4   an acknowledge message can be delayed and grouped with at least one subsequent

5   acknowledge message.